“Touch your skin”: a new method for suspecting of leprosy

Instituto Lauro de Souza Lima, Bauru - SP
Faculdade de Odontologia/USP, Bauru – SP
Centro de Saúde Jardim Guanabara - MT
Pontifícia Universidade Católica, Curitiba - PR
Instituto Oswaldo Cruz, Rio de Janeiro - RJ
Touch your skin

Concept: Light touch fingers sliding

Objectives:

- To evaluate the applicability of a new and simple method “TYS” for suspecting of leprosy in an endemic population.

- To standardize and evaluate the self palpation methodology to identify individuals with loss or decreased cutaneous sensibility.
Touch your skin

Type of study

- Experimental
- Transversal

Place

- Centro de Saúde Jardim Guanabara - Rondonópolis – MT
- Municipality with 66.4 new cases/100,000 inhabitants (MS, 2012)
Studied population

Individuals older than 6 years, with or without dermatological and/or neurological complaint:

- Contacts of people affected by leprosy
- Members of the military
- Students
- General population
- Health professionals
Exclusion Criteria

- Previous dermatological and/or neurological examination
- Leprosy diagnosis
- Physical and/or cognitive disability
- Popular terms related to loss or diminished cutaneous sensibility not recognized

"Do you feel or have already felt numbness in the skin of any part of your body?"

Yes or No
Methods

Palpation of the skin:

- slide the fingers on the skin with smooth and gentle movements
- areas: face and ears / neck / trunk / upper and lower limbs
- direction: cranio-podal/ anteroposterior/ right-left

TYS positive / TYS negative
Methods

Cutaneous sensibility test with the 6 Semmes-Weinstein filaments – maximum 3 patches

MF positive / MF negative
Results
Results

TYS (n=509) age range: 7 - 82 years (mean 35.8 years)

Male and Female distribution:
- Male: 195 (38%)
- Female: 314 (62%)

Total: 509
Results

TYS (n=509) Self palpation of the skin

- Positive: 126 (24.7%)
- Negative: 383 (75.2%)
Results

SW - set of 6 monofilaments in 126 TYS positive

- 83 (66%) – with diminished or loss of sensitivity
  - 0.2g (n=20)
  - 2.0g (n=18)
  - 4.0g (n=13)
  - 10g (n=11)
  - 300g (n=15)
  - didn’t feel 300g (n=6)

- 43 (34%) – without diminished or loss of sensitivity
Results

n=509
- TYS positive
- TYS negative

n=126
- MF positive
- MF negative
Conclusion

Due to the importance of identifying restricted area(s) with diminished or loss of cutaneous sensibility for the diagnosis of leprosy, the TYS method represents an innovative resource whose impact needs to be confirmed in further studies.